

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Kindly cancel claims 1 - 5 without prejudice, in favor of new claims 6 - 11.

Claims 1 - 5. (Cancelled)

6. (New) A process for ethylene recovery in a recirculating gas process for preparing vinyl acetate, comprising:

- a) reacting ethylene, acetic acid and oxygen in a heterogeneously catalyzed reaction at a pressure of from 1 to 50 bar and a temperature of from 50°C to 200°C,
- b) separating a product gas stream comprising ethylene, vinyl acetate, acetic acid, water, carbon dioxide and non-reactive gases, and
- c) recycling only a portion of ethylene back into the recirculating gas process, wherein
- d) the product gas stream is fed at system pressure to a recycle gas scrubber charged with acetic acid, and vinyl acetate is removed from the recycle gas, and
- e) the vinyl acetate-free recycle gas is subsequently fed to a CO₂ absorption to remove carbon dioxide, and then
- f) a portion of the ethylenic recycle gas stream is recycled into the reaction system, without further non-reactive gases being separated; and 1% to 25% by volume of the ethylenic gas stream is discharged without further non-reactive gases being separated, and is reused in one or more processes which consume ethylene, other than processes for preparing vinyl acetate.

7. (New) The process of Claim 6, wherein the discharged proportion of the ethylenic gas stream is fed to an oxidation processes for preparing ethylene oxide, ethylene glycol, acetaldehyde, or acetic acid, or fed to an oxychlorination of ethylene to dichloroethane, or to a direct chlorination of ethylene to dichloroethane.

8. (New) The process of Claim 6, wherein the discharged proportion of the ethylenic gas stream is fed to a process for alkylating benzene to ethylbenzene, a process for carbonylation to acrylic acid, to a polyolefin polymerization, to a hydroformylation process to produce propionaldehyde, in the Reppe carbonylation to propionic acid, or to an Alfol process for preparing long-chain primary alcohols.

9. (New) The process of Claim 6, wherein step a) is conducted at a pressure in the range of 8 to 12 bar and at a temperature in the range of 130°C to 200°C.

10. (New) The process of Claim 6, wherein the vinyl acetate-free product gas contains 60 to 65 weight percent ethylene and 12 to 18 weight percent carbon dioxide, and after CO₂ removal, contains 80 to 83% ethylene and 1 to 4% CO₂.

11. (New) The process of Claim 6, wherein 80 to 95% of the ethylenic cycle gas stream is recycled and 5 to 20% is fed to another process consuming ethylene.